5

10

20

## ABSTRACT:

To provide a circuit arrangement (100) for controlling a first terminal and a second terminal of a preferably contactless integrated circuit, particularly for testing a CMOS circuit, with which a multitude of integrated circuits can be tested simultaneously while using a low-cost structure and by which the circuit arrangement for a simple write/read unit assigned to the integrated circuit can be provided, it is proposed that the circuit arrangement (100) comprises:

- at least a control stage (10) which generates, from an external modulation signal (M<sub>0</sub>) and an external clock signal (C<sub>0</sub>)
  - a first modulation signal (M<sub>1</sub>);
  - a second modulation signal  $(M_2)$  which is temporally shifted with respect to the first modulation signal  $(M_1)$ ;
  - a preferably symmetrical first clock signal (C<sub>1</sub>); and
  - a preferably symmetrical second clock signal (C<sub>2</sub>) which is inverted with respect to the first clock signal (C<sub>1</sub>);
- 15 at least a first driver stage (40),
  - which is connected to a first power supply voltage  $(U_{dd,1})$  amplitude-modulated by the first modulation signal  $(M_1)$  and to a first reference potential  $(U_{ss,1})$  and
  - can be impressed with the first clock signal (C<sub>1</sub>) in such a way that the output voltage (U<sub>0,1</sub>) of the first driver stage (40), which can be applied to the first terminal of the integrated circuit, temporally assumes the value of the amplitude-modulated first power supply voltage (U<sub>dd,1</sub>) and temporally the value of the first reference potential (U<sub>ss,1</sub>) in accordance with the clock of the first clock signal (C<sub>1</sub>); and
- 25 at least a second driver stage (50),
  - which is connected to a second power supply voltage (U<sub>dd,2</sub>) amplitude-modulated by the second modulation signal (M<sub>2</sub>) and to a second reference potential (U<sub>ss,2</sub>) and

can be impressed with the second clock signal  $(C_2)$  in such a way that the output voltage  $(U_{0,2})$  of the second driver stage (50), which can be applied to the second terminal of the integrated circuit, temporally assumes the value of the amplitude-modulated second power supply voltage  $(U_{dd,2})$  and temporally the value of the second reference potential  $(U_{ss,2})$  in accordance with the clock of the second clock signal  $(C_2)$ .

Fig. 1

5